

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

009629

7590

02/25/2004

MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004 EXAMINER

KRISHNAN, SUMATI

ART UNIT PAPER NUMBER

2875

DATE MAILED: 02/25/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,859	09/28/2001	Kenichi Nishikawa	040894-5728	2375

TITLE OF INVENTION: SPARK PLUG

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	05/25/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,859		09/28/2001	Kenichi Nishikawa	040894-5728	2375
009629	7590	02/25/2004		EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			KRISHNAN, SUMATI		
				ART UNIT	PAPER NUMBER
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,			2875	
				DATE MAILED: 02/25/200	4

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 32 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 32 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 009629 02/25/2004 Certificate of Mailing or Transmission MORGAN LEWIS & BOCKIUS LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004 transmitted to the USPTO, on the date indicated below. (Depositor's name (Signature (Date) CONFIRMATION NO ATTORNEY DOCKET NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO. Kenichi Nishikawa 040894-5728 09/28/2001 09/964.859 TITLE OF INVENTION: SPARK PLUG **PUBLICATION FEE** DATE DUE SMALL ENTITY ISSUE FEE TOTAL FEE(S) DUE APPLN, TYPE 05/25/2004 \$1330 \$1630 NO nonprovisional CLASS-SUBCLASS **EXAMINER** ART UNIT 2875 313-141000 KRISHNAN, SUMATI 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); corporation or other private group entity government individual 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this form). □ Advance Order - # of Copies \_ Deposit Account Number Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or oth interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

TRANSMIT THIS FORM WITH FEE(S)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	Application No.	Applicant(s)	<u>U</u>
	09/964,859	NISHIKAWA ET AL.	U\
Notice of Allowability	Examiner	Art Unit	
	Sumati Krishnan	2875	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOT OF THE OFFICE	OR REMAINS) CLOSED in or other appropriate commu GHTS. This application is so	this application. If not included nication will be mailed in due co	l ourse. <b>THIS</b>
1. This communication is responsive to <u>2/02/04</u> .			
2. The allowed claim(s) is/are 2.3.5-9 and 11.			
3. $\boxtimes$ The drawings filed on <u>21 December 2001</u> are accepted by t	he Examiner.		•
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority undanal  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application	n No	on from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requ	irements
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			TICE OF
6. CORRECTED DRAWINGS ( as "replacement sheets") must	t be submitted.		
(a) I including changes required by the Notice of Draftsperson	on's Patent Drawing Review	( PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date		•	
(b) including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the			ack) of
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F			ote the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		ormal Patent Application (PTO- Immary (PTO-413),	152)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0	_ Paper No./I	Mail Date Amendment/Comment	
Paper No./Mail Date			·
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>	8. ☑ Examiners : 9. ☐ Other	Statement of Reasons for Allow .	rance

Application/Control Number: 09/964,859

Art Unit: 2875

### **DETAILED ACTION**

## Allowable Subject Matter

Claims 2-3 and 5-9 and 11 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2-3 and 5-9, the prior art of record neither shows nor suggests the glaze layer according to claim 3 containing at least one of phosphate ion, sulfate ion, fluoride ion and chloride ion in a content of 0.5 to 10 mol %.

Regarding claim 11, the prior art of record neither shows nor suggests the glaze layer according to claim 11 formed by adding at least one of K<sub>3</sub>PO<sub>4</sub> powder, BaSO<sub>4</sub> powder, CaF powder and KCI powder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Krishnan whose telephone number is 571-272-2372. The examiner can normally be reached on 8:00 am - 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/964,859

Art Unit: 2875

Page 3

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

Stephen Husar

Primary Examiner